

Mids ONLY

Work Order ID 75952

November-02-11 10:38:46 AM

\*75952\*

~~U/R~~

Page 1

Item ID: D3391-023

Revision ID:

Item Name: Mid Tube Assembly

Start Date: 02/11/2011 Start Qty: 1.00

Accept

\*N900040100\*

Setup Start

\*NS1\*

Required Date: 16/11/2011 Req'd Qty: 1.00

\*1\*

\*1\*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: M-L-T

Date: 11/11/02 Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr	Memo	0.00						
D3391	Rev H U/R 11-11-07								
100									
*100*	Skidtubes								
Skidtubes		1-Cut tube to finish length as per Dwg D3391							
Skidtubes		2-Identify as D3391-023							
		3-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391							
		4-Open saddles and GHW holes to Ø0.375" except for fwd saddle hole of detail "J"							
		5-Remove .030" from Fwd indexing Ridge as per Dwg D3391							
		6-Remove indexing ridge on Fwd & Aft end of skidtube as per Dwg D3391							
		7-Deburr							
		8-Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker,							
		9-Open wearplate holes of D3391-023 assembly detail section G-G to Ø0.250". (14 holes) as per Dwg D3391 and 2 holes in section Detail "J", do not open wearplate holes of section "J"							
		10-Open wearplate holes of D3391-023 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391							

DP 11-11-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 75952**

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Page 2

**Item ID:** D3391-023

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

**Revision ID:**

**Item Name:** Mid Tube Assembly

Stop

**\*NS2\***

**Start Date:** 02/11/2011 **Start Qty:** 1.00

**\*1\***

**Cust Item ID:**

**Required Date:** 16/11/2011 **Req'd Qty:** 1.00

**\*1\***

**Customer:**

**Reference:**

**Approvals:**

**Process Plan:**

**Date:**

**Tooling:**

**Date:**

Run

Start

**\*NR1\***

**QC:**

**Date:**

**SPC (Y/N):**

**Date:**

Stop

**\*NR2\***

**Sequence ID/  
Work Center ID**

**Operation  
Description**

**Set Up/  
Run Hours**

**Tool ID**

**Tool #**

**Plan  
Code**

**Accept  
Qty**

**Reject  
Qty**

**Reject  
Number**

**Insp.  
Stamp**

11-Open .375" holes to .438" \*\*\*do not open fwd saddle holes\*\*\*

12-Locate D3391-021 in D3391-023 at 9.00" (see view z-z)

13- Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drilled .188" dia hole, using t-pins and clicos to ensure perfect alignment, open up previously transferred pilot holes in D3391-023/-021 to 0.438" dia. in D3391-021

14- Transfer drill 2 wearplate holes into D3391-021 using DT8217, locating from two previously drilled holes, drill remaining wearplate holes into D3391-021.

15- Locating from two fwd wearplate holes drill remaining 6 wearplate holes in D3391-021 using DT8937

16- Open 2 fwd wearplate holes in D3391-023 to .250" dia.

17- counterbore two aft wearplate holes in D3391-021 as per dwg

18- Open 12 wearplate holes in D3391-021 to 0.297" dia.

19-Deburr and blow out all chips from inside tube

open hole detail J as per drawing D3391  
sheet 2 + 6

N/A

DP 11-11-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID:	D3391-023	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:							
Item Name:	Mid Tube Assembly					Stop *NS2*	
Start Date:	02/11/2011	Start Qty:	1.00	*1*	Cust Item ID:		
Required Date:	16/11/2011	Req'd Qty:	1.00	*1*	Customer:		
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110 <b>*110*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 S u/u/08							
120 <b>*120*</b> HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 DC 11/11/08							
130 <b>*130*</b> QC Quality Control	QC3- Inspect Part Finish Memo	0.00 DP 11-11-8							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID: D3391-023

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Mid Tube Assembly

Stop

\*NS2\*

Start Date: 02/11/2011 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 16/11/2011 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140

\*140\*

Skidtubes

Skidtubes

0.00

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Memo

0.00

- 1-Open float bag holes as per dwg
- 2-C'sink float bag holes as per dwg
- 3- Prepare tube for welding
- 4-Bond web in place as per Dwg D3391 & QSI 015.

Adhere for 12 hours)

A/R Sikaflex exp:

batch#: M119399

0.00

0.00

0.00

150

\*150\*

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

1 0 86 11/1/09

160

\*160\*

Skidtubes

Skidtubes

0.00

0.00

Skidtubes

- 1-Weld crossbolt spacer as per dwg D3391 & QSI 004
- 2-grind weld flush

0.00

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID:	D3391-023	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:							
Item Name:	Mid Tube Assembly					Stop *NS2*	
Start Date:	02/11/2011	Start Qty:	1.00	*1*	Cust Item ID:		
Required Date:	16/11/2011	Req'd Qty:	1.00	*1*	Customer:		
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 <b>*170*</b> QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 Sululu							
180 <b>*180*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 Sululu							
185 <b>*185*</b> HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo AND REALODINE AS PER PAR09-043	0.00 XSM 11/11/11							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 75952

November-02-11 10:38:47 AM

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Item ID: D3391-023

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Mid Tube Assembly

Stop

\*NS2\*

Start Date: 02/11/2011 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 16/11/2011 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

190

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

\*190\*

Powdercoat

Powder Coating

Memo

8-10 0.00  
320°F  
8-40

*1XGJmJn1w14*

200

QC3- Inspect Part Finish

0.00

\*200\*

QC

Quality Control

Memo

0.00

*1 B2 11-11-14.*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 75952

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Page 7

Item ID: D3391-023

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Mid Tube Assembly

Stop

\*NS2\*

Start Date: 02/11/2011 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 16/11/2011 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

210

\*210\*

Skidtubes

Skidtubes

Memo

0.00

1- insert D3391-021 into D3391-23

2- insert T-pins into first and third fwd saddle holes

3- ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per DSI 9364

4- remove T-pins and locate DT9415 from first and third crossbolt hole using T-pins and clekos

5- ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499". Remove DT9415

6- deburr, re-alodine and blow out chips

7- press fit D3591-1 spacers using DT9416 starting from 0.500" side

220

QC5- Inspect part completeness to step on W/O

0.00

\*220\*

QC

Quality Control

Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID** 75952

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<b>Item ID:</b>	D3391-023	<b>Accept</b>	<b>*N900040100*</b>	<b>Setup</b>	<b>Start</b>	<b>*NS1*</b>	
<b>Revision ID:</b>						<b>Stop</b>	<b>*NS2*</b>
<b>Item Name:</b>	Mid Tube Assembly						
<b>Start Date:</b>	02/11/2011	<b>Start Qty:</b>	1.00	<b>*1*</b>	<b>Cust Item ID:</b>		
<b>Required Date:</b>	16/11/2011	<b>Req'd Qty:</b>	1.00	<b>*1*</b>	<b>Customer:</b>		
<b>Reference:</b>							
<b>Approvals:</b>	<b>Process Plan:</b>	<b>Date:</b>	<b>Tooling:</b>	<b>Date:</b>	<b>Run</b>	<b>Start</b>	<b>*NR1*</b>
						<b>Stop</b>	<b>*NR2*</b>
<b>QC:</b>	<b>Date:</b>	<b>SPC (Y/N):</b>	<b>Date:</b>				

<b>Sequence ID/ Work Center ID</b>	<b>Operation Description</b>	<b>Set Up/ Run Hours</b>	<b>Tool ID</b>	<b>Tool #</b>	<b>Plan Code</b>	<b>Accept Qty</b>	<b>Reject Qty</b>	<b>Reject Number</b>	<b>Insp. Stamp</b>
230 <b>*230*</b> HandFinish	HandFinishing Memo	0.00							1 6211-11-14
Hand Finishing	Install Inserts as per Dwg								
240 <b>*240*</b> QC	QC5- Inspect part completeness to step on W/O Memo	0.00	Sulukay						
Quality Control		0.00							
250 <b>*250*</b> Packaging	Identify as per dwg & Stock Location: Memo	0.00							<i>[Signature]</i> 11/11/11
Packaging	Su :P	0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Item ID: D3391-023

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Mid Tube Assembly

Stop

\*NS2\*

Start Date: 02/11/2011 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 16/11/2011 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

260

\*260\*

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

11/11/11

11/11/11

MF  
11-11-16

W/O:

**WORK ORDER CHANGES**

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 1

Work Order ID: 75952

**\*75952\***

Parent Item: D3391-023

**\*D3391-023\***

Parent Item Name: Mid Tube Assembly

Start Date: 02/11/2011

Required Date: 16/11/2011

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP A05.10.20 New Issue KJ/EC  
 IPP B06.02.10 ECN773 dwg rev.D EC  
 IPP C 07.03.20 rev F dwg EC  
 IPP D 07.03.28 re-format EC  
 IPP E 07.10.31 ecn 1053P EC  
 IPP Rev:F ECN 1056 07-11-13 DD verified by: EC  
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC  
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC  
 IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP  
 Rev:J add in seq 140 expire date &# sikaflex DD 10.02.17 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2500-1-100		Manufactured	No		100	Each	65.0000	1	1	**			
-------------	--	--------------	----	--	-----	------	---------	---	---	----	--	--	--

**\*D2500-1-100\***

Skidtube Extrusion

Location	Loc Qty	Loc Code
HALL	65	
50251	65	

① DP 11-11-7

D3391-021		Manufactured	No		100	Each	0.0000	1	1	**			
-----------	--	--------------	----	--	-----	------	--------	---	---	----	--	--	--

**\*D3391-021\***

Fwd Tube Assembly

D3389-1		Manufactured	No		140	Each	0.0000	1	1	**			
---------	--	--------------	----	--	-----	------	--------	---	---	----	--	--	--

**\*D3389-1\***

Web

D3681-1		Manufactured	No		160	Each	29.0000	5	5	**			
---------	--	--------------	----	--	-----	------	---------	---	---	----	--	--	--

**\*D3681-1\***

Spacer

Location	Loc Qty	Loc Code
LG	29	
68958	2	
69893	2	
71845	25	

① DP 11-11-8

N/A DP 11-11-9

① DP 11-11-9

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

November-02-11 10:38:51 AM

Page 2

Work Order ID: 75952

\*75952\*

Parent Item: D3391-023

\*D3391-023\*

Parent Item Name: Mid Tube Assembly

Start Date: 02/11/2011

Required Date: 16/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3591-1

Manufactured No

210

Each

37.0000

2

2

\*\*

\*D3591-1\*

Bushing

Location	Loc Qty	Loc Code
ST068	37	
57350	1	
66147	8	
71847	28	

ALS4-1032-130

Purchased No

230

Each

2,279.000

20

20

\*\*

\*AI S4-1032-130\*

Insert

Location	Loc Qty	Loc Code
ST280	2000	
119084	2000	
ST281	279	
117717	2	
118237	12	
118312	2	
118386	263	

\* ALS-7-1032-130

119530.

20 BK 11-11-14.

1095-045.

76050.

1 BK 11-11-14.

AN3C-4A.

118706.

12 BK 11-11-14.

WHS 1149 C0332R.

118354.

12 BK 11-11-14.

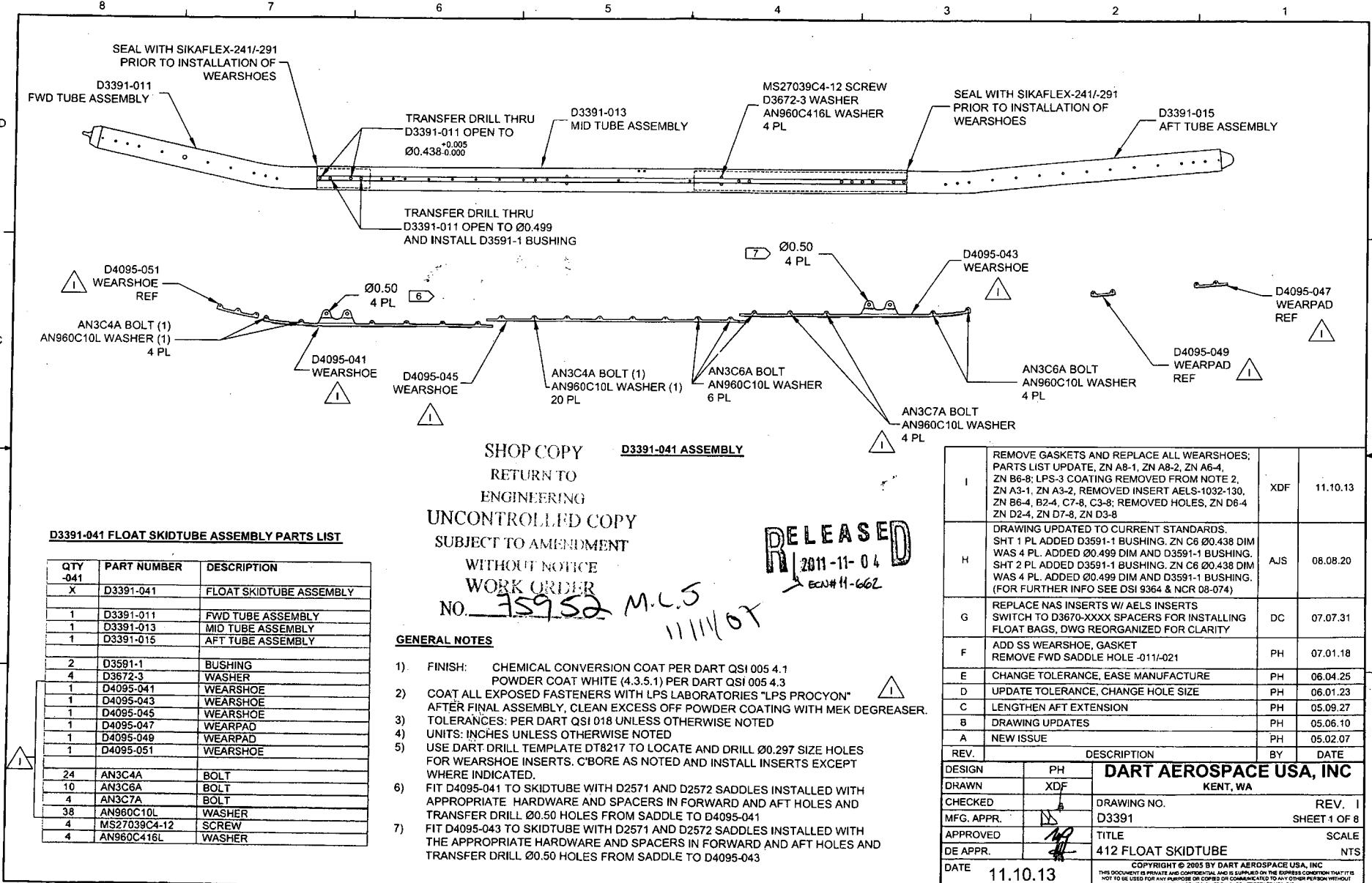
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries



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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

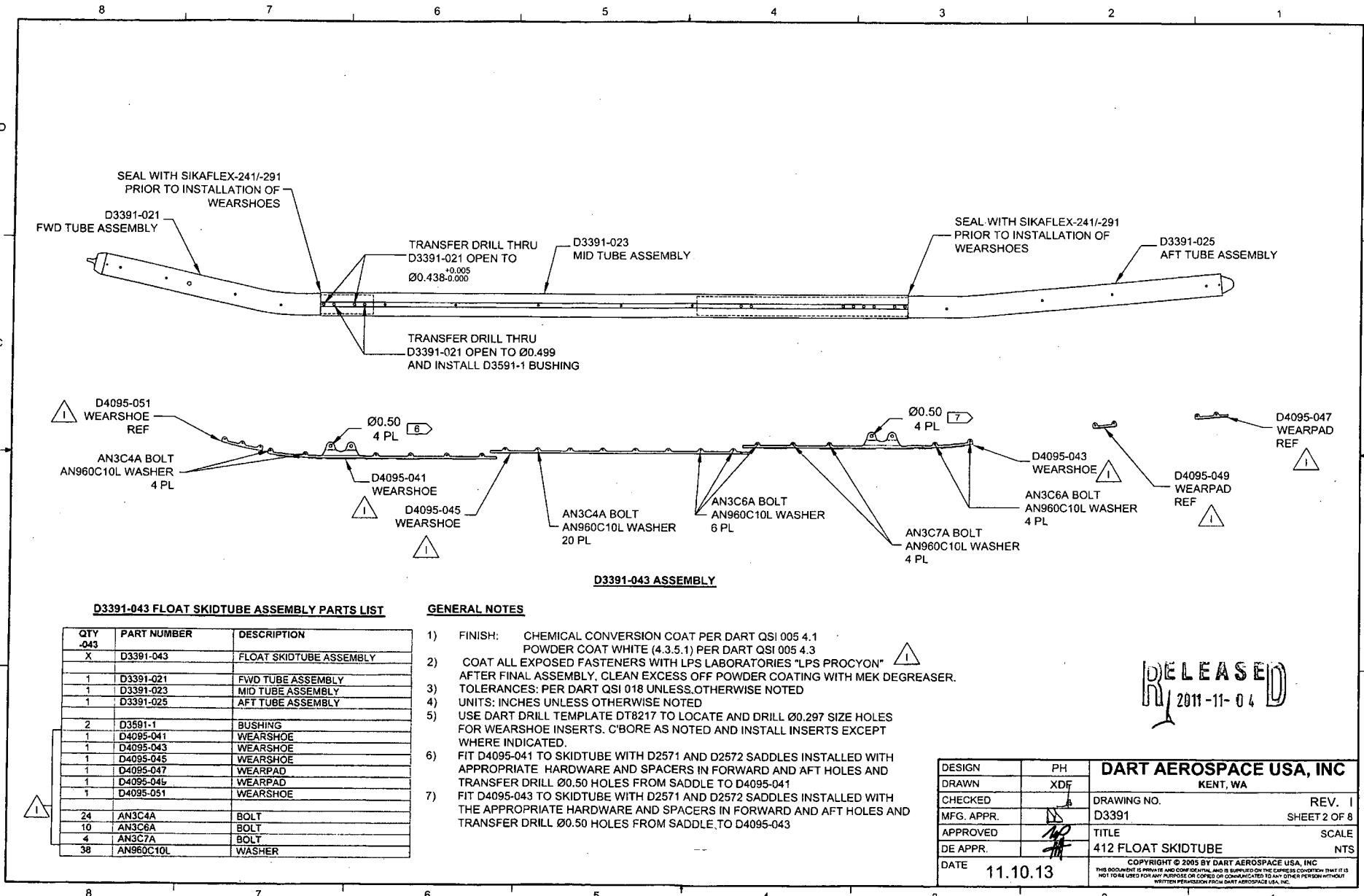
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NOTE: Date & initial all entries

75952



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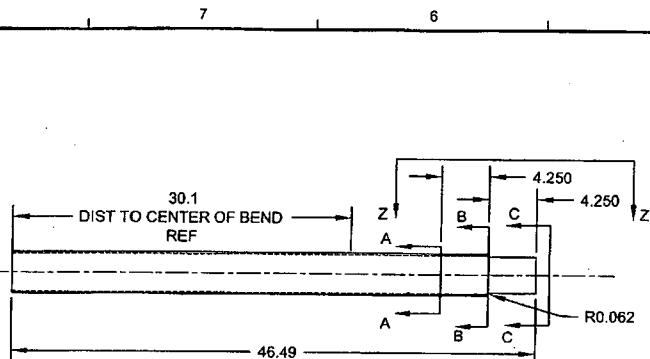
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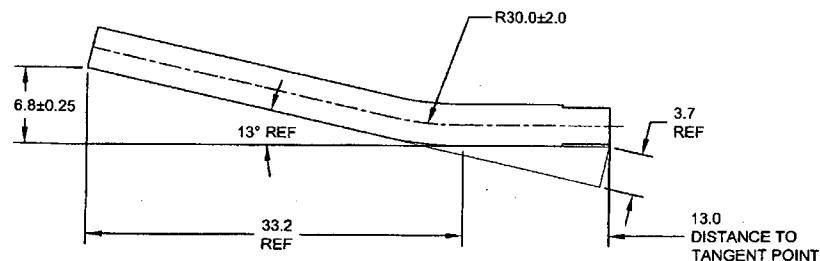
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

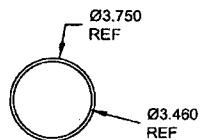
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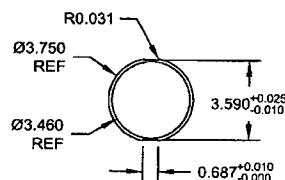
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(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



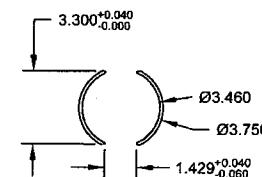
**D3391-11/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)



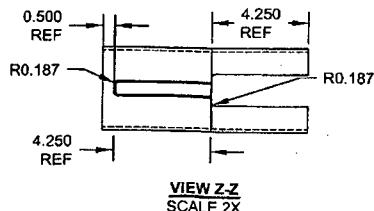
**SECTION A-A**  
SCALE 2X



**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X



**VIEW Z-Z**  
SCALE 2X

RELEASED  
2011-11-04

DESIGN DRAWN	PH XDF	DART AEROSPACE USA, INC KENT, WA
CHECKED		DRAWING NO. D3391
MFG. APPR.	X	REV. I SHEET 3 OF 8
APPROVED	X	TITLE 412 FLOAT SKIDTUBE
DE APPR.	X	SCALE NTS
DATE 11.10.13		COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE USA, INC. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

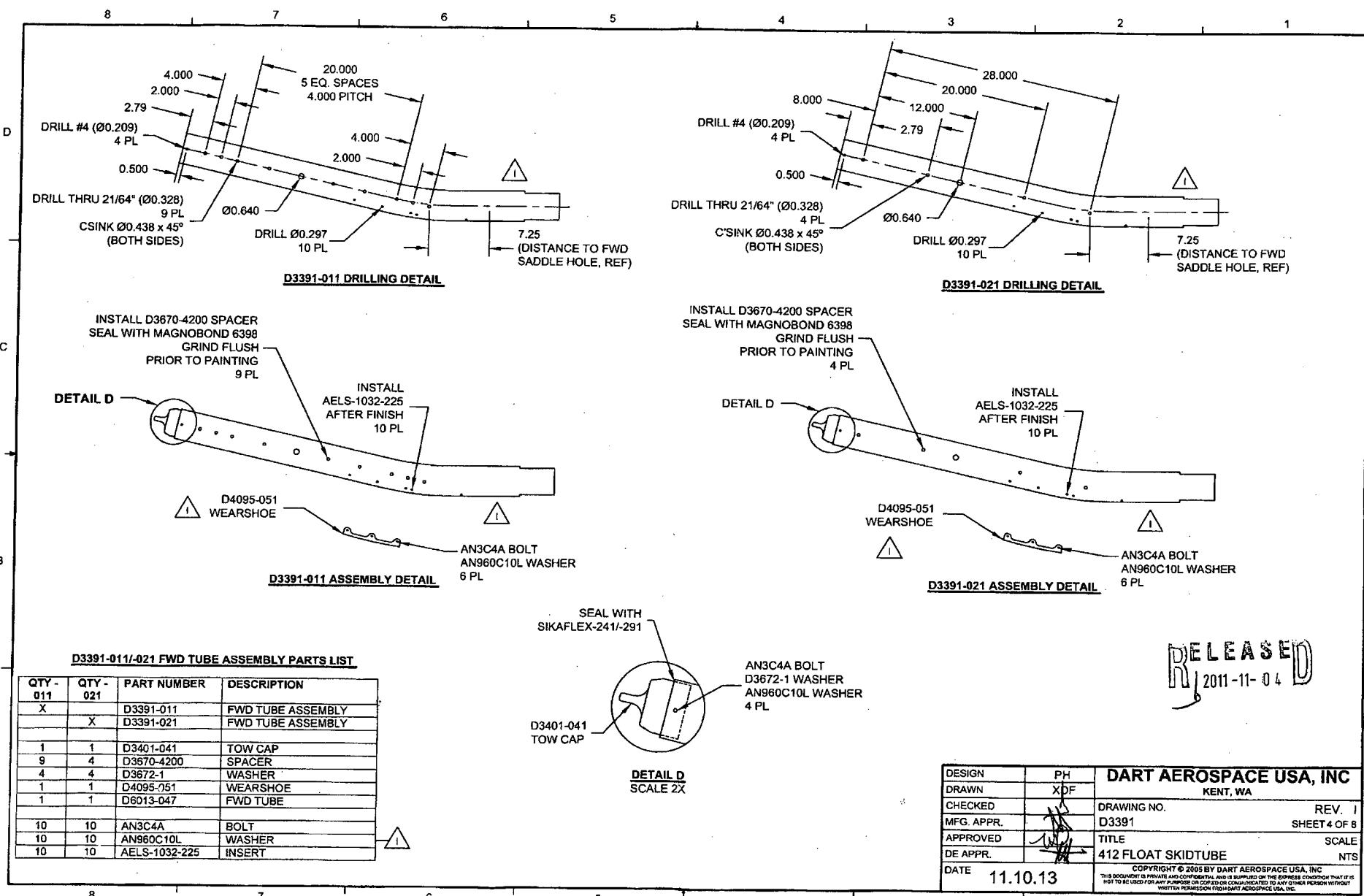
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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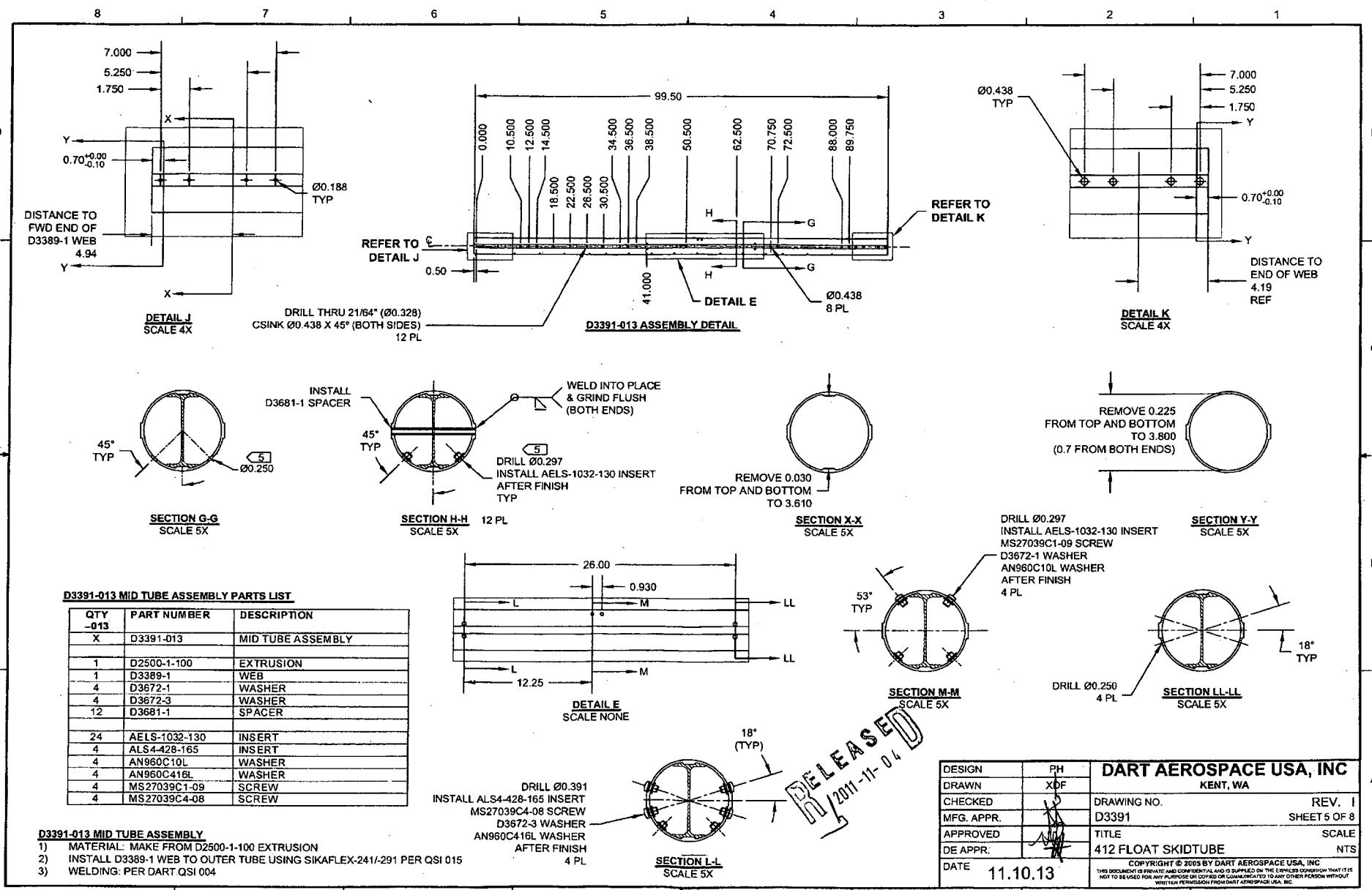
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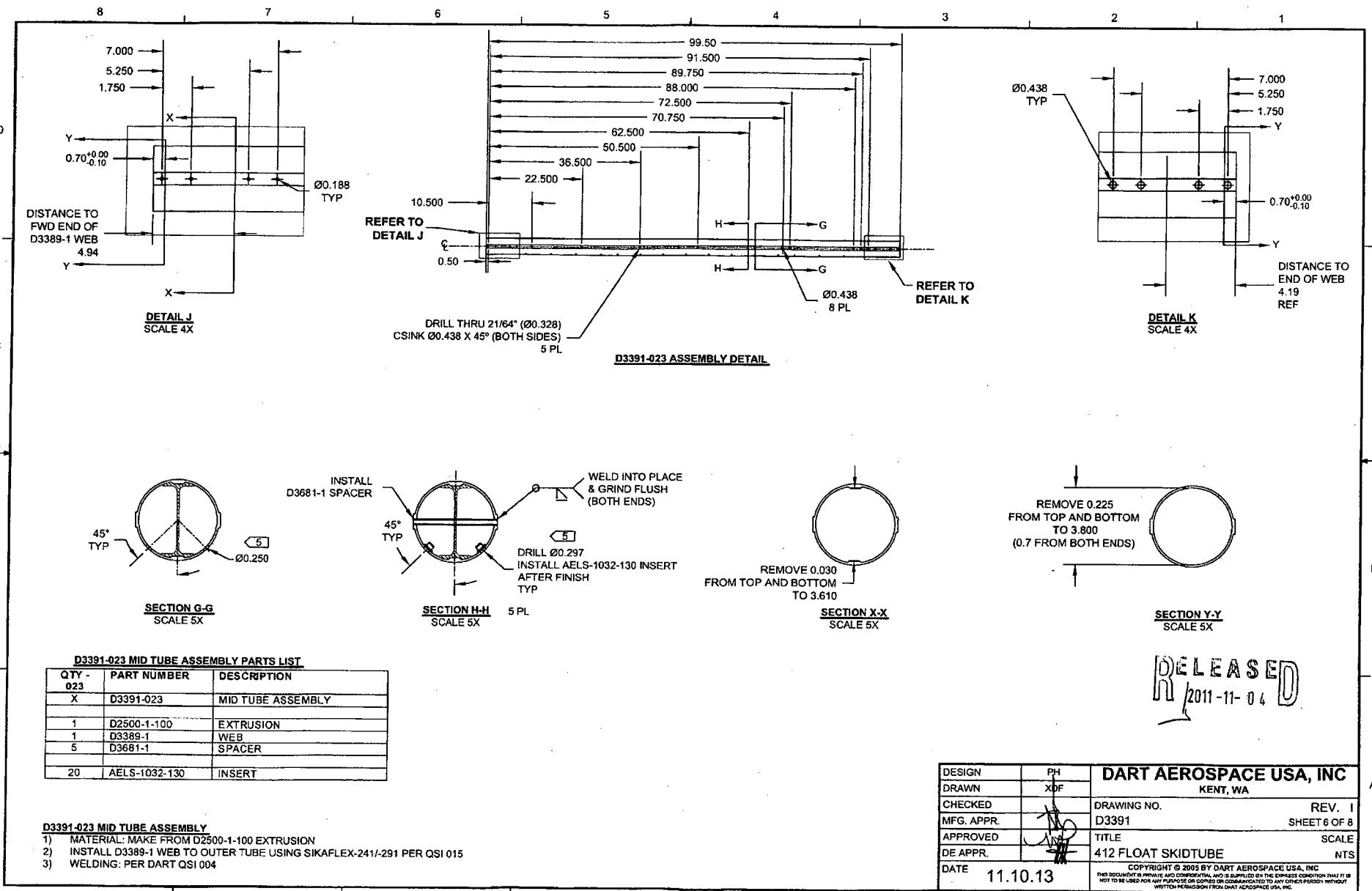
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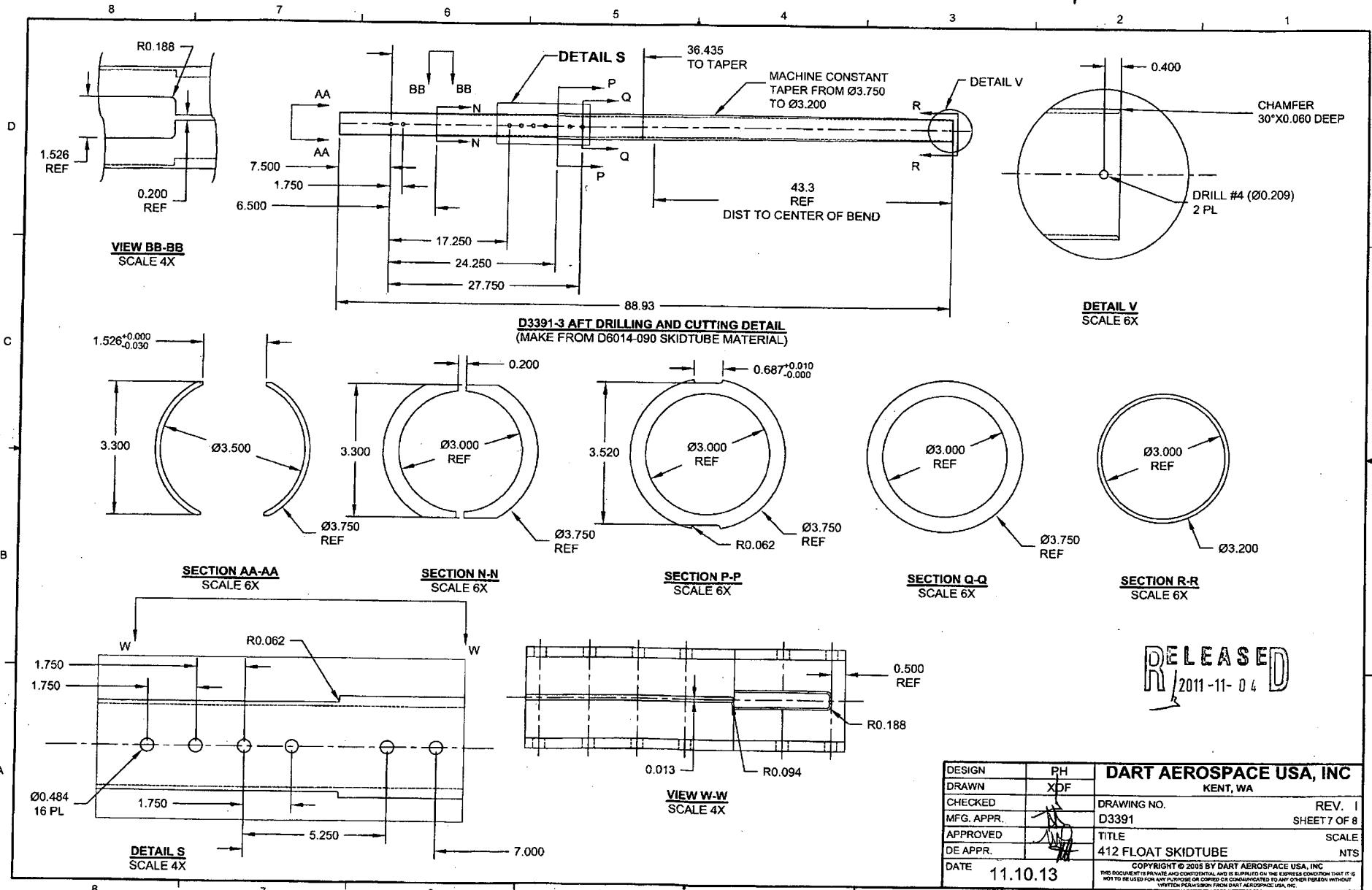
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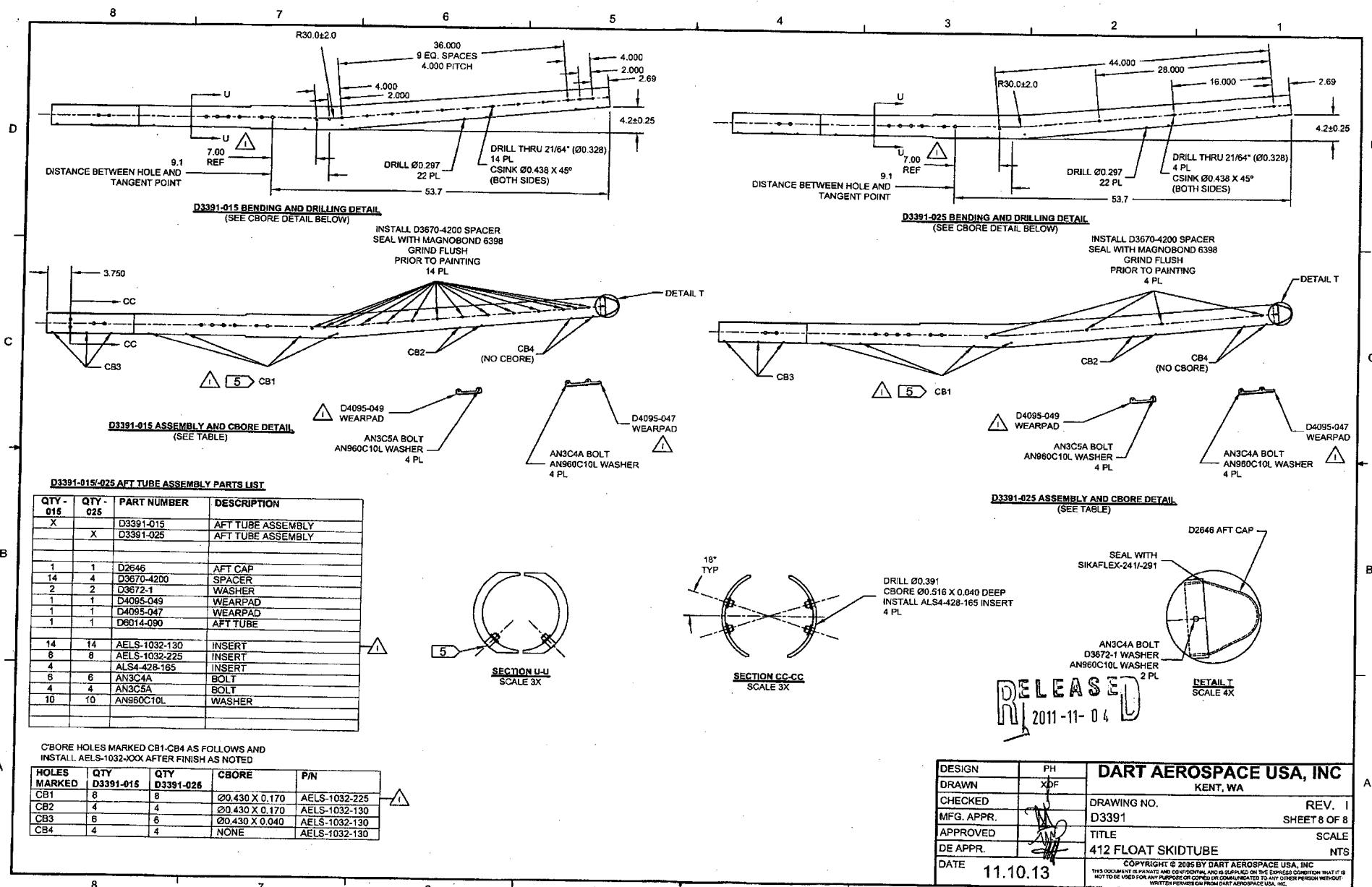
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NOTE: Date & initial all entries

75952



C BORE HOLES MARKED CB1-CB4 AS FOLLOWS AND  
INSTALL AELS-1D32-XXX AFTER FINISH AS NOTED

WIRING LAYOUT - REFER TO PERTINENT INSTRUCTIONS				
HOLES MARKED	QTY D3391-015	QTY D3391-026	CBORE	P/N
CB1	8	8	.04430 X .170	AELS-1032-225
CB2	4	4	.04430 X .170	AELS-1032-130
CB3	6	6	.04430 X .040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

DESIGN	PH	DART AEROSPACE USA, INC		
DRAWN	XDF	KENT, WA		
CHECKED		DRAWING NO.	REV. I	
MFG. APPR.	<i>[Signature]</i>	D3391	SHEET 8 OF 8	
APPROVED	<i>[Signature]</i>	TITLE	SCALE	
DE APPR.	<i>[Signature]</i>	412 FLOAT SKIDTUBE	NTS	
DATE	11.10.13	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS NOT TO BE USED FOR ANY PURPOSE EXCEPT BY THE INDIVIDUAL PERSON NAMED WRITER PERMITTED FROM DART AEROSPACE USA, INC.		

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 264

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 73035  
Part number: 3391-023  
Description: MIS Tube  
Welding Process: Tig[] Mig[]  
Base materiel: Aluminum  
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[] fail[]  
Penetration: pass[] fail[]

UNACCEPTABLE

Cracks: pass[] fail[]  
Undercut: pass[] fail[]  
Pin holes: pass[] fail[]  
Overlap (cold lap) pass[] fail[]  
Porosity (surface): pass[] fail[]  
Coloration: pass[] fail[]

Qualifier Barclay Elliott Date of Test Coupon 11-08-31  
Welder Barclay Elliott Date of Test Coupon 11-08-31

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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